

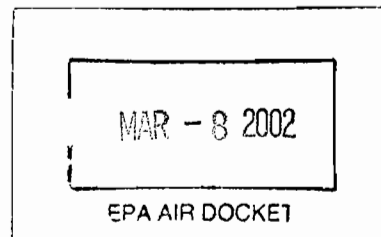
A-95-32  
IV-D-13

February 22, 2002



Air and Radiation Docket and Information Center (6102)  
Attention: Docket Number A-95-32  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Mr. Rick Colyer  
United States Environmental Protection Agency  
Policy, Planning, and Standards Group  
Emission Standards Division (MD-13)  
Research Triangle Park, North Carolina 27711



*RE: Owens Corning's Supplemental Comments on Asphalt/Roofing MACT*

Dear Sir or Madam:

Owens Corning would like to thank U.S. EPA for allowing us to supplement our comments on the Proposed National Emission Standards for Hazardous Air Pollutants ("NESHAP") from Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR Part 63, Subpart LLLLL (hereinafter, "the Asphalt/Roofing MACT"). Our initial comments on the proposed Asphalt/Roofing MACT were filed on January 22, 2002. These supplemental comments raise one new issue related to the proposed MACT's definition of "asphalt processing facility" and, in addition, provide further supporting documentation and data related to one of our initial comments concerning low-level hazardous air pollutant ("HAP") sources such as storage tanks and loading racks.

**I. Owens Corning fully supports the definition of "asphalt processing facility" which is included in the proposed Asphalt/Roofing MACT at 40 CFR 63.8698.**

Owens Corning has appreciated the opportunity to work closely with U.S. EPA through the Asphalt Roofing Manufacturers Association ("ARMA") in the development of the proposed Asphalt/Roofing MACT. Throughout the MACT development process, it has been clear that the proposed standard was to apply to *asphalt processing operations* at asphalt processing plants, petroleum refineries, asphalt roofing plants, and elsewhere. Clearly, it was not intended by U.S. EPA that the MACT apply only to asphalt processing operations at roofing manufacturing facilities (or only to asphalt being processed for eventual use at such roofing facilities).

The HAPs generated during asphalt processing are largely independent of the asphalt product being produced (e.g., paving asphalt versus roofing asphalt), and the type of facility at which the asphalt processing is taking place (e.g., a petroleum refinery versus a roofing manufacturing facility). Following are examples of similarities between various asphalt processing operations:

- Roofing products (such as built-up roofing asphalt, saturant, and coating) are all blown to softening points which range between 100° F and 230° F.
- Paving products, similarly, are made by blowing to softening points which range between 120° F and 160° F.
- Paving products can also be made by blowing to high softening points, then blending the material back with the original feedstock. *See, e.g., Kevin Gallagher et al., Influence of Air-blowing on the Performance Properties of Paving Asphalt, Transportation Research Board (1996).*<sup>1</sup>
- A wide variety of feedstocks are used to make asphalt roofing products using the air blowing process – including paving asphalts that are identical to those which would be air blown for paving.
- Vacuum tower bottoms (which are softer than traditional paving grades of asphalt) can be used to manufacture both paving products and roofing products with the air blowing process.
- Ferric chloride (which is frequently used as a blowing agent in the manufacture of roofing asphalt) can also be used as a blowing agent in the manufacture of paving asphalt.<sup>2</sup>

U.S. EPA should continue to be mindful of the fact that “asphalt processing” and “asphalt roofing manufacturing” were initially listed as separate source categories on July 16, 1992 (57 Fed. Reg. 31576). The source categories were only later merged (due to the fact that the sources and processes are closely related and often collocated) for the sake of convenience and regulatory economy during the MACT development process. This merger was in no way the result of an intention to regulate only those asphalt processing activities which are related to roofing manufacturing.

Given the foregoing, U.S. EPA should summarily reject any comment which suggests that the Asphalt/Roofing MACT should apply only to asphalt processing directly related to roofing

---

<sup>1</sup> [http://owenscorning.com/trumbull/resources/downloads/paperno\\_960518.pdf](http://owenscorning.com/trumbull/resources/downloads/paperno_960518.pdf)

<sup>2</sup> This is evidenced by two (2) Petro-Canada, Inc. patents which involve using ferric chloride as a blowing agent for paving asphalt: U.S. Pat. No. 5,284,509 (“Method for producing superior quality paving asphalt and product therefrom.”); and, U.S. Pat. No. 5,695,555 (“Method for the production of improved paving asphalt and product prepared therefrom.”).

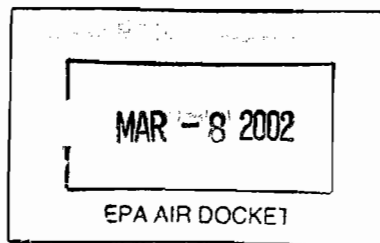
A-95-32  
IV-D-13

February 22, 2002



Air and Radiation Docket and Information Center (6102)  
Attention: Docket Number A-95-32  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Mr. Rick Colyer  
United States Environmental Protection Agency  
Policy, Planning, and Standards Group  
Emission Standards Division (MD-13)  
Research Triangle Park, North Carolina 27711



*RE: Owens Corning's Supplemental Comments on Asphalt/Roofing MACT*

Dear Sir or Madam:

Owens Corning would like to thank U.S. EPA for allowing us to supplement our comments on the Proposed National Emission Standards for Hazardous Air Pollutants ("NESHAP") from Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR Part 63, Subpart LLLLL (hereinafter, "the Asphalt/Roofing MACT"). Our initial comments on the proposed Asphalt/Roofing MACT were filed on January 22, 2002. These supplemental comments raise one new issue related to the proposed MACT's definition of "asphalt processing facility" and, in addition, provide further supporting documentation and data related to one of our initial comments concerning low-level hazardous air pollutant ("HAP") sources such as storage tanks and loading racks.

**I. Owens Corning fully supports the definition of "asphalt processing facility" which is included in the proposed Asphalt/Roofing MACT at 40 CFR 63.8698.**

Owens Corning has appreciated the opportunity to work closely with U.S. EPA through the Asphalt Roofing Manufacturers Association ("ARMA") in the development of the proposed Asphalt/Roofing MACT. Throughout the MACT development process, it has been clear that the proposed standard was to apply to *asphalt processing operations* at asphalt processing plants, petroleum refineries, asphalt roofing plants, and elsewhere. Clearly, it was not intended by U.S. EPA that the MACT apply only to asphalt processing operations at roofing manufacturing facilities (or only to asphalt being processed for eventual use at such roofing facilities).

The HAPs generated during asphalt processing are largely independent of the asphalt product being produced (e.g., paving asphalt versus roofing asphalt), and the type of facility at which the asphalt processing is taking place (e.g., a petroleum refinery versus a roofing manufacturing facility). Following are examples of similarities between various asphalt processing operations:

- Roofing products (such as built-up roofing asphalt, saturant, and coating) are all blown to softening points which range between 100° F and 230° F.
- Paving products, similarly, are made by blowing to softening points which range between 120° F and 160° F.
- Paving products can also be made by blowing to high softening points, then blending the material back with the original feedstock. *See, e.g., Kevin Gallagher et al., Influence of Air-blowing on the Performance Properties of Paving Asphalt*, Transportation Research Board (1996).<sup>1</sup>
- A wide variety of feedstocks are used to make asphalt roofing products using the air blowing process – including paving asphalts that are identical to those which would be air blown for paving.
- Vacuum tower bottoms (which are softer than traditional paving grades of asphalt) can be used to manufacture both paving products and roofing products with the air blowing process.
- Ferric chloride (which is frequently used as a blowing agent in the manufacture of roofing asphalt) can also be used as a blowing agent in the manufacture of paving asphalt.<sup>2</sup>

U.S. EPA should continue to be mindful of the fact that “asphalt processing” and “asphalt roofing manufacturing” were initially listed as separate source categories on July 16, 1992 (57 Fed. Reg. 31576). The source categories were only later merged (due to the fact that the sources and processes are closely related and often collocated) for the sake of convenience and regulatory economy during the MACT development process. This merger was in no way the result of an intention to regulate only those asphalt processing activities which are related to roofing manufacturing.

Given the foregoing, U.S. EPA should summarily reject any comment which suggests that the Asphalt/Roofing MACT should apply only to asphalt processing directly related to roofing

---

<sup>1</sup> [http://owenscorning.com/trumbull/resources/downloads/paperno\\_960518.pdf](http://owenscorning.com/trumbull/resources/downloads/paperno_960518.pdf)

<sup>2</sup> This is evidenced by two (2) Petro-Canada, Inc. patents which involve using ferric chloride as a blowing agent for paving asphalt: U.S. Pat. No. 5,284,509 (“Method for producing superior quality paving asphalt and product therefrom.”); and, U.S. Pat. No. 5,695,555 (“Method for the production of improved paving asphalt and product prepared therefrom.”).

manufacturing operations. Clearly, the intention was (and still is) to regulate asphalt processing activities that have the potential to be major sources of HAP regardless of what type of facility the processing is conducted at, and regardless of what type of end product is being produced.

**II. Owens Corning wishes to reiterate that the Asphalt/Roofing MACT should be changed such that low-level sources of HAP such as low temperature, low vapor pressure storage tanks and loading racks would not be subject to the MACT.**

In its initial comments filed on January 22, 2002, Owens Corning stated its belief that it is unnecessary to regulate low-level sources of HAP such as storage tanks and loading racks. Owens Corning went on to support the "true vapor pressure" threshold of 1.5 psia<sup>3</sup> (pounds per square inch actual) for both storage tanks and loading racks which has been advocated by ARMA. Pursuant to ARMA's proposal, storage tanks and loading racks below this vapor pressure threshold (or below the 1.93 megagram size threshold already included in the proposed MACT by U.S. EPA) would not be regulated.

In support of our position (and ARMA's position) that low vapor pressure storage tanks and loading racks are low-level sources of HAP and, therefore, should not be regulated, we refer U.S. EPA to the following published paper: David C. Trumbore, *Estimates of Air Emissions from Asphalt Storage Tanks and Truck Loading*, Environmental Progress, Vol. 18, No. 4 at 250 (Winter 1999).<sup>4</sup> Using the emissions estimating techniques referenced in this paper, it is reasonable to conclude that only a very low level of HAPs are emitted from low vapor pressure, low temperature asphalt storage tanks and loading racks. Excluding such low level HAP sources from the proposed MACT would allow the regulated community to focus its resources on the higher level HAP sources that MACTs are intended to regulated.

Owens Corning thanks you for considering its supplemental comments, and urges U.S. EPA to revise the proposed Asphalt/Roofing MACT consistent with all of our comments.

Sincerely,



**Tom Lecorchick**, VP & General Mgr.

**Owens Corning**

Integrated Materials Solutions Business

Composites Solutions

---

<sup>3</sup> Or the equivalent 10.3 kPa (kilo Pascals).

<sup>4</sup> [http://owenscorning.com/trumbull/resources/downloads/estimates\\_air.pdf](http://owenscorning.com/trumbull/resources/downloads/estimates_air.pdf)

A-95-32  
IV-D-13



"Friesner, Jane"  
<jane.friesner@owens  
corning.com>

02/22/2002 02:52 PM

To: "'a-and-r-docket@epa.gov'" <a-and-r-docket@epamail.epa.gov>, Rick  
Colyer/RTP/USEPA/US@EPA

cc: "Haak, William" <William.Haak@owenscorning.com>

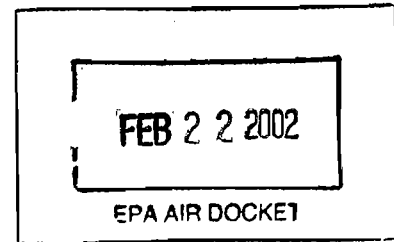
Subject: Owens Corning's Supplemental Comments on the Proposed  
Asphalt/Roo fing MACT

Attached are Owens Corning's supplemental comments to the proposed National  
Emission Standards for Hazardous Air Pollutants from Asphalt Processing and Asphalt  
Roofing Manufacturing (40 CFR Part 63, Subpart LLLLLL).

Note that a hard copy version of these comments will be sent under separate cover.

Thank you.

William H. Haak  
Regulatory Law Counsel  
Owens Corning



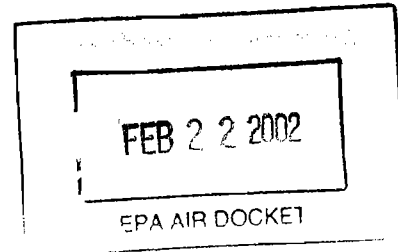
<<Asphalt MACT Supp Comments.doc>> Asphalt MACT Supp Comments.  
The information contained in this communication and its attachment(s) is  
intended only for the use of the individual to whom it is addressed and may  
contain information that is privileged, confidential, or exempt from  
disclosure. If the reader of this message is not the intended recipient, you  
are hereby notified that any dissemination, distribution, or copying of this  
communication is strictly prohibited. If you have received this communication  
in error, please notify postmaster@owenscorning.com and delete the  
communication without retaining any copies. Thank you.

Translations available: <http://www.owenscorning.com/emailfooter.html>



February 22, 2002

Air and Radiation Docket and Information Center (6102)  
 Attention: Docket Number A-95-32  
 United States Environmental Protection Agency  
 1200 Pennsylvania Avenue, NW  
 Washington, D.C. 20460



Mr. Rick Colyer  
 United States Environmental Protection Agency  
 Policy, Planning, and Standards Group  
 Emission Standards Division (MD-13)  
 Research Triangle Park, North Carolina 27711

*RE: Owens Corning's Supplemental Comments on Asphalt/Roofing MACT*

Dear Sir or Madam:

Owens Corning would like to thank U.S. EPA for allowing us to supplement our comments on the Proposed National Emission Standards for Hazardous Air Pollutants ("NESHAP") from Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR Part 63, Subpart LLLLL (hereinafter, "the Asphalt/Roofing MACT"). Our initial comments on the proposed Asphalt/Roofing MACT were filed on January 22, 2002. These supplemental comments raise one new issue related to the proposed MACT's definition of "asphalt processing facility" and, in addition, provide further supporting documentation and data related to one of our initial comments concerning low-level hazardous air pollutant ("HAP") sources such as storage tanks and loading racks.

**I. Owens Corning fully supports the definition of "asphalt processing facility" which is included in the proposed Asphalt/Roofing MACT at 40 CFR 63.8698.**

Owens Corning has appreciated the opportunity to work closely with U.S. EPA through the Asphalt Roofing Manufacturers Association ("ARMA") in the development of the proposed Asphalt/Roofing MACT. Throughout the MACT development process, it has been clear that the proposed standard was to apply to *asphalt processing operations* at asphalt processing plants, petroleum refineries, asphalt roofing plants, and elsewhere. Clearly, it was not intended by U.S. EPA that the MACT apply only to asphalt processing operations at roofing manufacturing facilities (or only to asphalt being processed for eventual use at such roofing facilities).

The HAPs generated during asphalt processing are largely independent of the asphalt product being produced (e.g., paving asphalt versus roofing asphalt), and the type of

facility at which the asphalt processing is taking place (e.g., a petroleum refinery versus a roofing manufacturing facility). Following are examples of similarities between various asphalt processing operations:



- Roofing products (such as built-up roofing asphalt, saturant, and coating) are all blown to softening points which range between 100° F and 230° F.
- Paving products, similarly, are made by blowing to softening points which range between 120° F and 160° F.
- Paving products can also be made by blowing to high softening points, then blending the material back with the original feedstock. See, e.g., Kevin Gallagher et al., *Influence of Air-blowing on the Performance Properties of Paving Asphalt*, Transportation Research Board (1996).<sup>1</sup>
- A wide variety of feedstocks are used to make asphalt roofing products using the air blowing process – including paving asphalts that are identical to those which would be air blown for paving.
- Vacuum tower bottoms (which are softer than traditional paving grades of asphalt) can be used to manufacture both paving products and roofing products with the air blowing process.
- Ferric chloride (which is frequently used as a blowing agent in the manufacture of roofing asphalt) can also be used as a blowing agent in the manufacture of paving asphalt.<sup>2</sup>

U.S. EPA should continue to be mindful of the fact that “asphalt processing” and “asphalt roofing manufacturing” were initially listed as separate source categories on July 16, 1992 (57 Fed. Reg. 31576). The source categories were only later merged (due to the fact that the sources and processes are closely related and often collocated) for the sake of convenience and regulatory economy during the MACT development process. This merger was in no way the result of an intention to regulate only those asphalt processing activities which are related to roofing manufacturing.

Given the foregoing, U.S. EPA should summarily reject any comment which suggests that the Asphalt/Roofing MACT should apply only to asphalt processing directly related to roofing manufacturing operations. Clearly, the intention was (and still is) to regulate asphalt processing activities that have the potential to be major sources of HAP regardless of what type of facility the processing is conducted at, and regardless of what type of end product is being produced.

**II. Owens Corning wishes to reiterate that the Asphalt/Roofing MACT should be**

**changed such that low-level sources of HAP such as low temperature, low vapor pressure storage tanks and loading racks would not be subject to the MACT.**

In its initial comments filed on January 22, 2002, Owens Corning stated its belief that it is unnecessary to regulate low-level sources of HAP such as storage tanks and loading racks. Owens Corning went on to support the "true vapor pressure" threshold of 1.5 psia<sup>3</sup> (pounds per square inch actual) for both storage tanks and loading racks which has been advocated by ARMA. Pursuant to ARMA's proposal, storage tanks and loading racks below this vapor pressure threshold (or below the 1.93 megagram size threshold already included in the proposed MACT by U.S. EPA) would not be regulated.

In support of our position (and ARMA's position) that low vapor pressure storage tanks and loading racks are low-level sources of HAP and, therefore, should not be regulated, we refer U.S. EPA to the following published paper: David C. Trumbore, *Estimates of Air Emissions from Asphalt Storage Tanks and Truck Loading*, Environmental Progress, Vol. 18, No. 4 at 250 (Winter 1999).<sup>4</sup> Using the emissions estimating techniques referenced in this paper, it is reasonable to conclude that only a very low level of HAPs are emitted from low vapor pressure, low temperature asphalt storage tanks and loading racks. Excluding such low level HAP sources from the proposed MACT would allow the regulated community to focus its resources on the higher level HAP sources that MACTs are intended to regulate.

Owens Corning thanks you for considering its supplemental comments, and urges U.S. EPA to revise the proposed Asphalt/Roofing MACT consistent with all of our comments.

Sincerely,

*Signed Electronically*

**Tom Lecorchick, VP & General**

Mgr.

**Owens Corning**  
Integrated Materials Solutions

Business

Composites Solutions

[http://owenscorning.com/trumbull/resources/downloads/paperno\\_960518.pdf](http://owenscorning.com/trumbull/resources/downloads/paperno_960518.pdf)

<sup>1</sup> This is evidenced by two (2) Petro-Canada, Inc. patents which involve using ferric chloride as a blowing agent for paving asphalt: U.S. Pat. No. 5,284,509 ("Method for producing superior quality paving asphalt and product therefrom."); and, U.S. Pat. No. 5,695,555 ("Method for the production of improved paving asphalt and product prepared therefrom.").

<sup>2</sup> Or the equivalent 10.3 kPa (kilo Pascals).

<sup>3</sup> [http://owenscorning.com/trumbull/resources/downloads/estimates\\_air.pdf](http://owenscorning.com/trumbull/resources/downloads/estimates_air.pdf)